Calendar No. 859

100TH CONGRESS
2d Session

SENATE

REPORT
100-443

STEEL AND ALUMINUM ENERGY CONSERVATION AND TECHNOLOGY COMPETITIVENESS ACT OF 1988

AUGUST 2 (legislative day, AUGUST 1), 1988.—Ordered to be printed

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Mr. JOHNSTON, from the Committee on Energy and Natural Resources, submitted the following

REPORT

[To accompany S. 2470]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 2470) to promote technology competitiveness and energy conservation in the American steel industry, having considered the same, reports favorably thereon with an amendment and an amendment to the title and recommends that the bill as amended do pass.

The amendments are as follows:

1. Strike out all after the enacting clause and insert in lieu thereof the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Steel and Aluminum Energy Conservation and Technology Competitiveness Act of 1988".

SEC. 2. FINDINGS AND PURPOSES.

(a) FINDINGS.—The Congress finds that—

(1) maintaining viable domestic steel and aluminum industries is vital to the national security and economic well being of the United States; and

(2) the promotion of technology competitiveness and energy conservation in the American steel and aluminum industries by the Federal Government is necessary to maintain viable domestic steel and aluminum industries.

(b) PURPOSES.—The purposes of this Act are to increase the energy efficiency and enhance the competitiveness of American steel, aluminum and other metals industries by providing Federal incentives for the establishment of public-private sector partnerships to undertake scientific research and development to develop advanced technologies utilizing the expertise of the steel and aluminum industries, Government-owned laboratories of the Department of Energy and the National Bureau of Standards, universities, State development agencies, and others.

SEC. 3. DEFINITIONS.

For the purpose of this Act, the term—

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(1) "Secretary" means the Secretary of Energy.

(2) "domestic company" means a company which is substantially involved in the United States' domestic production or processing of steel, aluminum, or other metals and has a substantial percentage of their operations located within the United States.

(3) "management plan" and "plan" means the management plan provided for in section 4(a)(2).

SEC. 4. ESTABLISHMENT OF SCIENTIFIC RESEARCH AND DEVELOPMENT PROGRAM TO DEVELOP COMPETITIVE MANUFACTURING TECHNOLOGIES AND INCREASE ENERGY EFFICIENCY IN THE STEEL, ALUMINUM AND OTHER METALS INDUSTRIES.

(a) GENERAL AUTHORITY.—(1) The Secretary of Energy, pursuant to the authority provided under provisions of the Federal Nonnuclear Research and Development Act of 1974 (42 U.S.C. 5901, et sec.), shall establish an industrial energy conservation and competitive technology program to conduct scientific research and development up to proof-of-concept testing of technologies to carry out the purposes of this Act. Such program shall provide the financial and technical assistance and other incentives which, in the judgment of the Secretary, are necessary to carry out the purposes of this Act.

(2) MANAGEMENT PLAN.—Within 90 days after the date of enactment of this Act, the Secretary shall publish a management plan to be administered and carried out as a part of the Department of Energy's energy conservation programs, for the conduct of scientific research and development necessary to carry out the purpose of this Act. The management plan shall be subject to the following conditions:

(A) the Federal financial obligation shall not exceed 70 percent of the total cost of projects in which there is industry participation;

(B) the Federal contribution may be up to 100 percent of the cost of projects undertaken without industry participation but with the participation of independent laboratories, universities, or non-profit organizations.

(C) in selecting projects, the Secretary shall give priority to projects which include cost-sharing or matching grants from State industrial development sources, industrial and other non-Federal sources.

(D) the knowledge resulting from the research and development activities conducted under the plan shall be used exclusively for the benefit of the domestic steel and aluminum industries.

(E) all proprietary rights of the American steel and aluminum companies shall be protected as provided in section 4.

(3) The Secretary shall consult with representatives of the affected industries and labor in evaluating the progress of research and development activities conducted under the plan.

(4) The Secretary, from time to time, may update the management plan.

(b) PRIORITIES.—In the conduct of research and development activities under the plan, priority shall be given to projects involving—

(1) STEEL PROJECTS.—

(A) the direct production of liquid steel from domestic materials;

(B) the production of near-net shape forms from liquid, powder, or solid steel;

(C) the development of universal grades of steel;

(D) the application of automatic processing technology;

(E) the removal of residual elements from steel scrap;

(F) the treatment and storage of waste materials and other by-products from steel production and processing.

(G) the development of super-plastic steel processing;

(H) the development of advanced coatings for sheet steels; and

(I) the development of dtechnologies and equipment related to the production of steel for the protection of the environment and the safety and health of workers; and

(2) ALUMINUM AND OTHER METALS PROJECTS.—

(A) the production of aluminum;

(B) the application of automatic processing technology;

(C) the treatment and storage of waste materials and other by-products from aluminum production and processing;

(D) the manufacture of aluminum mill products;

(E) aluminum recycling technologies;

(F) the development of technologies and equipment related to the production of aluminum for the protection of the environment and the safety and health of workers; and

(G) other metals technologies which, in the judgment of the Secretary, further the purposes of this Act.

SEC. 5. PROTECTION OF PROPRIETARY RIGHTS.

(a) PROPRIETARY RIGHTS.—Notwithstanding any provisions to the contrary in subchapter II of chapter 5 of title 5, United States Code, except as provided in subsection (d), no trade secrets of the American steel and aluminum companies or commercial or financial information furnished by representatives of such companies on a privileged or confidential basis shall be disclosed in the conduct of the plan or a result of activities under the plan.

(b) PATENT RIGHTS VESTED IN THE UNITED STATES.—All patent rights from inventions developed under the plan implement pursuant to this Act shall be vested in accordance with section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901).

(c) PATENT LICENSING.—(1) Domestic companies which are not research participants under this Act may receive licenses from the Department of Energy to the information and patents generated under the plan. Licensees under this section shall not have the right to sublicense except as necessary for the sale of products or equipment. The Department of Energy shall charge a reasonable fee for such licenses. Royalty fees paid under this section shall be equitably distributed among the direct cost-sharing participants and the United States.

(2) Patents developed under the plan shall be licensed to participants at a discount in accordance with the percent contribution of the participant to the activity generating the patent.

(d) EXCEPTION.—The Secretary may exempt for five years any information which he determines would be harmful to American steel, aluminum and other metals companies if made public, generated as part of steel, aluminum, or other metals initiative at Government laboratories or with Federal funding, from subchapter II of chapter 5 of title 5, United States Code.

SEC. 6. COORDINATION WITHIN DEPARTMENT OF ENERGY.

The Secretary shall coordinate the research and development conducted under the plan with other research and development being conducted by the Department of Energy, in order to increase efficiency and avoid duplication of effort.

SEC. 7. EXPANDED STEEL AND ALUMINUM RESEARCH PROGRAM IN NATIONAL BUREAU OF STANDARDS.

The National Bureau of Standards, through its Institute for Materials Science and Engineering and in coordination with the Department of Energy, shall conduct an expanded program of steel and aluminum research to provide necessary measurement, sensor, and other research in support of activities conducted under the plan.

SEC. 8. REPORTS.

The Secretary, in consultation with the Director of the National Bureau of Standards, shall prepare and submit annually to the President and the Congress at the close of each fiscal year a complete report of the research and development activities carried out under the plan during the fiscal year involved, including the actual and anticipated obligation of funds, for such activities, together with such recommendations as the Secretary may consider appropriate for further legislative, administrative, and other actions, including actions by the American steel and aluminum industries, which should be taken in order to achieve the purpose of this section. The report submitted at the close of the fiscal year 1993 shall also contain a complete summary of activities under the plan from the first year of its operation, along with an analysis of the extent to which it has succeeded in accomplishing the purpose of this Act.

SEC 9. AUTHORIZATION OF APPROPRIATIONS.

(a) TO THE SECRETARY.—There are authorized to be appropriated to the Secretary, to carry out the functions of the Department of Energy under this Act, the sum of $15,000,000, for the fiscal year 1989, $20,000,000, for the fiscal year 1990, and $25,000,000, for each of the fiscal years 1991, 1992, 1993. Not less than two-thirds of the amounts appropriated in any fiscal year shall be for steel projects.

(b) TO THE BUREAU.—There are authorized to be appropriated to the Director of the National Bureau of Standards, to carry out the functions of the Bureau under this Act, the sum of $3,000,000 for each of the fiscal years 1989, 1990, 1991, 1992, 1993.

SEC. 10. EFFECTIVE DATE.

(a) IN GENERAL.—Subject to subsection (b), this Act shall take effect at the start of the fiscal year 1989.

(b) TERMINATION.—This Act and all authority under this Act shall cease to be effective at the close of the fiscal year 1993.

2. Amend the title so as to read:

A bill to promote energy conservation and technology competitiveness in the American steel and aluminum industries.

PURPOSE

The purposes of S. 2470, as stated in section 2(b), are to increase the energy efficiency and enhance the competitiveness of American steel, aluminum and other metals industries by providing Federal incentives for the establishment of public-private sector partnerships to undertake scientific research and development to develop advanced technologies utilizing the expertise of the steel and aluminum industries, Government-owned laboratories of the Department of Energy and the National Bureau of Standards, universities, State development agencies, and others.

BACKGROUND

The U.S. steel industry accounts for approximately 7 percent of the Nation's total industrial energy consumption. The efficiency of the industry has increased by roughly one-third since the early 1970's. This increased efficiency is due almost exclusively to two changes in the industry: increasing the use of continuous casting which is more efficient than the traditional batch casting process, and increasing the use of scrap metal which eliminates several energy intensive steps in the steelmaking process in which iron ore is reduced to iron.

The continued implementation of these two changes in the domestic steel industry is expected to sustain and further the industry's energy efficiency improvements. However, these two changes will eventually yield diminishing energy conservation improvements and there is a potential for even greater efficiency improvements through the development of other efficient steelmaking technologies. For example, the steelmaking industries of Italy, Sweden and Germany use 25 to 40 percent less energy to produce each ton of steel than does the U.S. steel industry. Moreover, experts have testified before Congress that new steelmaking technologies which "leapfrog" existing technology could result in domestic industry energy savings as high as 30 percent. The U.S. steel industry has been unable to take full advantage of these opportunities because declining profits have forced reductions in funding for the modernization of facilities and for the research and development of new technology. In response to this problem, in 1986 the U.S. Government began to provide R&D assistance to the U.S. steel industry; a strategy long ago adopted by foreign competitors.

Aluminum is also an energy-intensive business requiring huge facilities and many forms of energy to process raw material, bauxite, into a metal that, in most applications, saves more energy than it takes to produce. Aluminum requires energy at every processing step: heat to refine the bauxite into alumina; electricity to reduce the alumina to metal; more heat to prepare the metal for forming;

and power and fuels to run the mills, presses and other equipment that create semi-finished and finished products.

Aluminum reduction plants consume 70 percent of the energy used by the industry, primarily in the form of electricity to drive off the oxygen in the alumina to produce metallic aluminum. Because the amount of electricity used to produce aluminum has been the most important cost factor for the aluminum industry, efforts to improve energy efficiency have been continuous.

The aluminum industry's existing conservation program has resulted in an energy input reduction of almost 22 percent since 1972. Ongoing recycling efforts also conserve energy, saving 95 percent of the energy it takes to make metal from ore. The aluminum industry conducts regular energy conservation workshops to discuss new developments, including projects to improve production technology and conserve energy. Government assistance of such projects will contribute significantly to the industry's efforts to maintain technological superiority and to improve energy efficiency. The continued competitiveness of the domestic aluminum industry depends, in large part, on its ability to control costs. Improved production, recycling and waste management technologies, and continued improvement in energy efficiency will contribute significantly to controlling these costs and to maintaining the U.S. aluminum industry's competitiveness in domestic and world markets.

In the fiscal year 1986 Continuing Resolution (Public Law 99-190) Congress provided that "$7.5 million * * * shall be available for a research and development initiative with the National Laboratories for new technologies up to proof-of-concept testing to increase significantly the energy efficiency of processes that produce steel * * *". The legislative history of the initiative suggested that priority be given to four areas of research: (1) the direct reduction of domestic raw materials, such as scrap, to liquid steel; (2) the production of near net-shape solids from liquid steel using electromagnetic casting; (3) the development of universal grades of steel; and (4) the application of automatic processing. For fiscal year 1987, Congress appropriated an additional $2 million for this program. In fiscal year 1988 the initiative was again authorized and provided $4 million in additional funding. Without further authorization, the initiative is scheduled to terminate at the end of this fiscal year.

LEGISLATIVE HISTORY

S. 2470 was introduced on June 6, 1988, by Senators Metzenbaum and Heinz. A hearing was held before the Subcommittee on Regulation and Conservation on July 1, 1988, in Independence, Ohio. On July 27, 1988, the bill was considered and ordered reported, with amendment, in an open business session.

COMMITTEE RECOMMENDATIONS AND TABULATION OF VOTES

The Senate Committee on Energy and Natural Resources in an open business session on July 27, 1988, considered S. 2470 and by a vote of 19 yeas and 0 nays recommends that the Senate pass S. 2470, if amended, as described herein.

The rollcall vote on reporting the measure was 19 yeas and 0 nays as follows:

YEAS	NAYS
Johnston	
Rumpers	
Ford	
Metzenbaum*	
Melcher	
Bradley	
Bingaman*	
Wirth	
Fowler	
Conrad*	
McClure	
Hatfield*	
Weicker*	
Domenici*	
Wallop	
Murkowski	
Nickles	
Hecht*	
Evans	

*Indicates vote by proxy.

COMMITTEE AMENDMENTS

There are two Committee amendments: one, in the nature of a substitute for the text of the bill; and two, to amend the title.

The amendment in the nature of a substitute would maintain the general structure of the program proposed in S. 2470, as introduced, but it would expand the program to include aluminum and other metals. The amendment also adds a "purposes" section to the bill; it establishes priorities for aluminum research projects; and it clarifies that the general authority for such research, and for the treatment of patent rights, shall be as established under the provisions of the Federal Nonnuclear Research and Development Act of 1974 (42 U.S.C. 5901, et sec.).

The Committee amendment also establishes three new research priorities for steel projects and seven priorities for aluminum and other metal projects, and adds three new conditions to the management plan to be developed under the Act, and under which the program would be administered. The management plan condition stating that the National Laboratories are not required to be involved in every research project, included in the bill as introduced, was deleted because it was unnecessary. It is not intended that the National Laboratories be required to be involved in every project, nor is there a basis to argue that they should. Finally, the amendment increases the authorization levels for the program in recognition of the expanded scope to include aluminum and other metals. However, the amendment requires that not less than two-thirds of the amounts appropriated in any fiscal year for the program shall be for steel projects.

The second Committee amendment would modify the title of the bill to conform to the changes made by the substitute text.

The Committee amendments are not intended to alter the provisions of S. 2470, as introduced, with respect to: findings, proprie-

tary rights, patent licensing, agency coordination, the role of the National Bureau of Standards, reports, or effective dates, except to expand these provisions to cover aluminum and other metals.

The Committee notes that the steel energy conservation program has been authorized under appropriations legislation for several years, its management plan is complete, and the program is underway. On the other hand, S. 2470, if enacted, would authorize expansion of the program to include aluminum and other metals. Because the steel program is already underway, the Committee expects that the steel projects of this new expanded program can proceed without consideration to the management plans or projects designed to address aluminum or other metals.

COST AND BUDGETARY CONSIDERATIONS

In compliance with paragraph 11(a) of Rule XXVI of the Standing Rules of the Senate, the following estimate of the cost of this measure has been provided by the Congressional Budget Office:

CONGRESSIONAL BUDGET OFFICE
U.S. CONGRESS
WASHINGTON, DC 20515

July 29, 1988

Honorable J. Bennett Johnston, Jr.
Chairman
Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

The Congressional Budget Office has prepared the attached cost estimate for S. 2470, the Steel and Aluminum Energy Conservation and Technology Competitiveness Act of 1988.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

James L. Blum

James L. Blum
Acting Director

cc: Honorable James A. McClure
Ranking Minority Member

CONGRESSIONAL BUDGET OFFICE

COST ESTIMATE

July 29, 1988

1. BILL NUMBER: S. 2470

2. BILL TITLE:

Steel and Aluminum Energy Conservation and Technology Competitiveness Act of 1988

3. BILL STATUS:

As ordered reported by the Senate Committee on Energy and Natural Resources, July 27, 1988.

4. BILL PURPOSE:

S. 2470 would establish a federal research and development program to promote energy conservation in the steel and aluminum industries. The bill would require the Secretary of Energy to prepare a management plan for carrying out such research and development. The bill would also require the National Bureau of Standards to conduct an expanded program of steel and aluminum research in support of the Department of Energy activities. These authorities would be in effect from the start of fiscal year 1989 through the end of fiscal year 1993.

For Department of Energy activities, S. 2470 authorizes $15 million in fiscal year 1989, $20 million in fiscal year 1990, and $25 million for each of the fiscal years 1991, 1992, and 1993. For Bureau of Standards activities, the bill authorizes $3 million per year for fiscal years 1989 through 1993.

5. ESTIMATED COST TO THE FEDERAL GOVERNMENT:

(by fiscal years, in millions of dollars)

	1989	1990	1991	1992	1993
Authorization Level	18	23	28	28	28
Estimated Outlays	5	15	27	27	28

The budget impact of this bill falls within budget functions 270 and 370.

Basis of Estimate

CBO assumes that all amounts authorized are appropriated and that spending will occur at historical rates for similar research and development programs. The authorization levels for all years are established in the bill.

6. ESTIMATED COST TO STATE AND LOCAL GOVERNMENTS: None

7. ESTIMATE COMPARISON: None

8. PREVIOUS CBO ESTIMATE: None

9. ESTIMATE PREPARED BY: Peter Fontaine (226-2860).

10. ESTIMATE APPROVED BY:

James L. Blum
Assistant Director
for Budget Analysis

REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of Rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred on the enactment of S. 2470.

It is the Committee's view that the resolution is not a regulatory measure in the sense of imposing Government-established standards on private individuals or businesses. Participation of either individuals or businesses in the program established by S. 2470 is completely voluntary. It is also the Committee's view that implementation of S. 2470 would not result in a substantial increase in paperwork for the Federal Government as the measure would authorize the continuation and expansion of an existing government program.

EXECUTIVE COMMUNICATIONS

The only executive communications regarding S. 2470 are the views of the Administration submitted to the Subcommittee on Regulation and Conservation for its July 1, 1988 hearing, as follows:

Statement of Donna R. Fitzpatrick

Assistant Secretary for Conservation and Renewable Energy

U.S. Department of Energy

before the

Subcommittee on Energy Regulation and Conservation

Committee on Energy and Natural Resources

U.S. Senate

July 1, 1988

Mr. Chairman and Members of the Committee, I appreciate this opportunity to appear before you today to provide information on the Department of Energy's ongoing Steel Initiative Program and to discuss with you the proposed Steel Technology Competitiveness and Energy Conservation Act of 1988. We all realize the importance of a strong and viable steel industry to the economic health and national security of the United States. One component of a strong domestic steel industry is the development and subsequent implementation of new technologies that will increase the energy efficiency of steel production and increase the technological competitiveness of the steel industry vis-a-vis foreign competition. However, the Administration does not believe the proposed Steel Technology Competitiveness & Energy Conservation Act of 1988 will effectively achieve this goal, and for that reason the Administration opposes the Act.

As you know, Fiscal Year 1986 through 1988 Interior Appropriations legislation directs the Department of Energy to establish and conduct a research and development program, commonly known as the Steel Initiative. Fiscal Year 1986 funding was $7.134 million, followed by $2 million in 1987 and $4 million in 1988. As of June 1988, $3.85 million of these funds have been obligated, leaving over $9 million unobligated. Although DOE is publicizing the availability of these funds, soliciting proposals and reviewing existing proposals, we feel that the funds already appropriated will be sufficient for conducting research and

development on approved and anticipated projects through FY 1989. Therefore, no funds for the Steel Initiative are included in the Department's FY 1989 budget request.

The essential point of my prepared remarks is that the Department of Energy already has a carefully structured Steel Initiative Program that embraces many aspects of sections 3 and 4 of Senate Bill 2470. For example, the Department of Energy issued a Steel Initiative Management Plan in April 1987. The Management Plan identifies steps to be taken for the protection of intellectual property and technology transfer. In addition, a Steel Initiative Research Plan was recently issued that assesses the opportunities for Steel Initiative projects in many of the areas designated in section 3(b) of the proposed legislation.

I would like now to elaborate on the Steel Initiative Management Plan. The Management Plan defines the roles and responsibilities of the organizations involved in implementing the Steel Initiative, including the Federal Government, the National Laboratories, industry and universities. It also provides information on required industry cost-sharing and identifies organizational and administrative procedures for conducting the program.

Preparation of the Management Plan began in the summer of 1986, and a draft Plan was circulated for comment. Recipients of the draft Plan included 71 steel companies, 17 domestic universities involved in steel research, 25 steel-related engineering and equipment companies, 8 steel-related trade associations, DOE National Laboratories, the National Bureau of Standards, the National Science Foundation, and the Bureau of Mines. In addition to receiving written comments from reviewers, DOE also held numerous formal and informal discussions with both research managers and representatives of the steel industry and national laboratories. These comments were taken into consideration in preparation of the Plan, which was issued in April 1987.

The Management Plan is intended to be a flexible document, one that can be readily modified to reflect changing circumstances. For example, the legislation authorizing the Steel Initiative Program (P.L. 99-190) requires that obligation of Federal funds is contingent on an agreement by industry to provide cash, in-kind contributions, or collaborative research as cost sharing of a least 30 percent of the funding provided by DOE. It also provides that cost sharing can be in the form of "other collaborative research and development activities related to the Steel Initative". As documented in the Steel Initiative Status Report issued in January of this year, allowance of this latter type of collaborative

research, referred to as indirect cost sharing, has complicated and delayed Steel Initiative implementation. Elimination of the potential for indirect cost sharing is desirable and could be made without significant changes to the comprehensive framework already developed for implementation of the Steel Initiative Program. It is imperative that all Steel Initiative projects have substantial real cost-sharing by industry to ensure that there is a company ready and able to use the technology being developed.

We disagree with the cost sharing provision in section 3(a)(2) of the proposed legislation that permits the Federal contribution to be up to 100 percent of the cost of projects undertaken without industry participation, but with the participation of independent laboratories, universities, or non-profit organizations. Funding of such research activities is best accomplished by using portions of the budget other than the Steel Initiative. We routinely manage university and other research and development projects where the Federal contribution is up to 100 percent. The Administration believes that the Steel Initiative is meaningless without the participation of the industry in all of the applied research.

The Management Plan also contains procedures for protecting intellectual property and facilitating technology transfer. These procedures have now been implemented and permit inventions made under the Steel Initiative to be conveyed to a holding company or

companies and then held in a discrete package by private cost-sharing participants. The company holding title to patents for the benefit of the participants has the right to grant royalty-free licenses to cost-sharing participants on a project-by-project basis, and to license the technology to non-participants.

With regard to section 4(b) of S.2470, DOE believes that all patent rights initially vested in DOE, should be subsequently waived to a holding company similar to that in the Steel Initiative Management Plan, rather than remain vested in DOE. Leaving the rights with DOE could make industry participation in research and development projects even more difficult to obtain. It could also have an adverse effect on the rate at which technology is commercialized. DOE believes that the holding company concept proposed in the current Management Plan is the preferred concept for handling intellectual property and technology transfer.

Subsequent to the completion of the Management Plan, a Research Plan was issued in April 1988. This Plan identifies research and development areas that we believe provide significant opportunities for cost reduction, energy efficiency and productivity improvement throughout the steelmaking process from raw materials to finished product. The Research Plan, which has much in common with the priorities set forth in section 3(b) of

S.2470, has been sent to steel manufacturers, equipment suppliers and designers, universities, and others throughout the country for information, comments, and recommendations.

This Research Plan is also dynamic and will be updated periodically to reflect new information and technology development. Recently Battelle's Columbus Laboratories has been retained to assist in the development of a more detailed and rigorous approach approach for selection of appropriate research and development areas. A final report from Battelle is due by the end of 1988.

In addition to a project underway to develop superplastic steels, a number of research proposals and preliminary research concepts have been submitted during the past several months by national laboratories, industry, and government agencies other than DOE. Topics have included ore reduction, scrap beneficiation, near-net-shape casting and thermomechanical processing. The proposals are being reviewed in accordance with the Steel Initiative Management Plan. Additional proposals in the areas of steelmaking and near-net-shape casting are anticipated; for example, the American Iron and Steel Institute has made public its intention to submit a proposal for development of a novel steelmaking process that would eliminate coke ovens and blast furnaces from the steel making process.

To further encourage submission of unsolicited proposals in the areas identified in the DOE Research Plan, a Notice of Program Interest was published on June 10, 1988 in the Federal Register and will be published shortly in the Commerce Business Daily. As I indicated previously, funds already appropriated will be more than sufficient for conducting research and development on approved and anticipated projects through FY 1989. DOE will also continue efforts to improve the dialogue among research organizations and steel producers on potential Steel Initiative Research Projects.

In summary, DOE strongly supports the need for a strong and viable steel industry, one that is technologically competitive with foreign steel producers. However, the Administration does not believe that the proposed "Steel Technology Competitiveness and Energy Conservation Act of 1988" is an appropriate vehicle to achieve those goals and therefore the Administration opposes it. In general, the current Steel Initiative program provides an effective framework for the Federal Government, the steel industry and research organizations to improve the technological competitiveness of the steel industry and we look forward to working closely with the Congress and the steel industry to attain this goal.

Thank you for the opportunity to testify on this important subject.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of Rule XXVI of the Standing Rules of the Senate, the Committee notes that no changes in existing laws are made by the bill S. 2470, as reported.

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Calendar No. 865

100TH CONGRESS
2d Session

SENATE

REPORT
100-449

CONGAREE SWAMP NATIONAL MONUMENT EXPANSION AND WILDERNESS ACT

AUGUST 5, 1988.—Ordered to be printed

Mr. JOHNSTON, from the Committee on Energy and Natural Resources, submitted the following

REPORT

[To accompany S. 2018]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 2018) to expand the boundaries of the Congaree Swamp National Monument, to designate wilderness therein, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended do pass.

The amendment is as follows:

Strike out all after the enacting clause and insert in lieu thereof the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Congaree Swamp National Monument Expansion and Wilderness Act".

SEC. 2. NATIONAL MONUMENT WILDERNESS.

(a) DESIGNATION OF WILDERNESS.—Certain lands comprising approximately 15,010 acres as generally depicted on a map entitled "Congress Swamp National Monument Wilderness-Proposed", and dated July 1988, are hereby designated as wilderness and therefore as components of the National Wilderness Preservation System. Such lands shall be known as the Congaree Swamp National Monument Wilderness.

(b) POTENTIAL WILDERNESS ADDITIONS.—Certain lands comprising approximately 6,840 acres as depicted on the map referenced in subsection (a) are hereby designated as potential wilderness additions. Such lands shall be managed by the Secretary of the Interior (hereinafter referred to as the "Secretary") insofar as practicable as wilderness until such time as said lands are designated as wilderness. Any lands designated as potential wilderness additions shall, upon acquisition of any non-Federal interests in land and publication in the Federal Register of a notice by the Secretary that all uses thereon prohibited by the Wilderness Act have ceased, thereby be designated wilderness, shall be part of the Congaree Swamp National Monument Wilderness, and shall be managed in accordance with the Wilderness Act.

S313-30

SEC. 3. MAP AND LEGAL DESCRIPTION.

As soon as practicable after the date of enactment of this Act, the map referenced in section 2 and a legal description of the boundaries of the wilderness and potential wilderness addition designated by this Act shall be on file and available for public inspection in the Office of the Director of the National Park Service, Department of the Interior, in the Office of the Superintendent of the Congaree Swamp National Monument and with the Committee on Interior and Insular Affairs of the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate. Each such map and legal description shall have the same force and effect as if included in this Act, except that correction of clerical and typographical errors in such map and legal description may be made.

SEC. 4. ADMINISTRATION.

Subject to valid existing rights, the lands designated as wilderness pursuant to this Act shall be administered by the Secretary in accordance with the applicable provisions of the Wilderness Act governing areas designated by that Act as wilderness, except that any reference in such provisions to the effective date of the wilderness Act shall be deemed to be a reference to the effective date of this Act, and where appropriate, any reference to the Secretary of Agriculture shall be deemed to be a reference to the Secretary.

SEC. 5. ADDITION TO CONGAREE NATIONAL MONUMENT.

The first section of the act approved October 18, 1976 (90 Stat. 2517), is amended by—

(1) inserting "(a)" after "That";

(2) striking all after "Federal Register" and inserting in lieu thereof a period; and

(3) adding at the end thereof the following:

"(b)(1) In addition to the lands described in subsection (a), the monument shall consist of the additional lands within the boundary as generally depicted on the map entitled 'Citizens Boundary Proposal for Congaree Swamp National Monument', numbered 178–80–0009, dated July 1988, which shall be on file and available for public inspection in the offices of the National Park Service, Department of the Interior. The map may be revised as provided in subsection (a). The total acreage of the monument including lands described in subsection (a) and this subsection shall not exceed 22,200 acres.

"(2) In determining the market value of properties acquired pursuant to this subsection, any depreciating effect or loss in value of such properties resulting from establishment of the Monument, which depreciating effect or loss occurred after Federal acquisition of the Beidler tract and prior to enactment of this subsection, shall not be taken into account.".

SEC. 6. AUTHORIZATION OF APPROPRIATIONS.

(a) LAND ACQUISITION FUNDS.—Section 5(a) of the Act approved October 18, 1976 (90 Stat. 2518), is amended by adding at the end thereof the following: "The Secretary may expend such additional sums as are necessary from the Land and Water Conservation Fund for acquisition of lands described in subsection (b) of the first section.".

(b) DEVELOPMENT FUNDS.—Section 5 of the Act approved October 18, 1976 (90 Stat. 2518), is amended by adding at the end thereof the following:

"(c) Notwithstanding subsection (a), there are hereby authorized to be appropriated $3,000,000 for construction and development within the monument.".

PURPOSE OF THE MEASURE

The purposes of S. 2018, as ordered reported, are to expand the boundaries of the Congaree Swamp National Monument, to designate certain lands therein as wilderness, and to increase the amount authorized to be appropriated for development within the monument.

BACKGROUND AND NEED

The Congaree Swamp contains the largest remnant of old-growth southern bottomland hardwood forest in the United States. In 1974, the Department of the Interior designated approximately 20,000

acres of the swamp as a National Natural Landmark. In 1976, the Congress designated 15,135 acres of the landmark as the Congaree Swamp National Monument. Most recently, in 1983, the monument was included in UNESCO's international network of Biosphere Reserves and has been nominated as a World Heritage Site.

When the Congress established the monument in 1976, it realized that the inclusion of the approximately 15,000 acre "Beidler tract" alone would probably not be sufficient to protect the resource. In recognition of this fact, the Congress directed the Park Service to:

> Identify the land and interests in land adjacent or related to the monument which are deemed necessary or desirable for the purposes of resource protection, scenic integrity, or management and administration of the area in furtherance of the purposes of this Act * * *.

In response to this provision in the 1976 Act, the National Park Service considered potential additions of more than 11,000 acres in Richland and Calhoun Counties. On November 9, 1987, the Park Service released its boundary study which recommended that approximately 2,464 acres of land be added to the monument.

As an alternative to the Park Service's recommendation, a "Citizens' Boundary Proposal" was formulated by a group of conservationists and local citizens which would add additional lands to the monument. S. 2018, as introduced by Senator Thurmond and Hollings, incorporated this "citizens" proposal in lieu of the Park Service's recommendation.

In addition to the proposed expansion of the monument, S. 2018 would designate most of the existing 15,000 acre monument as wilderness to be administered as part of the National Wilderness Preservation System. Most of the lands added to the monument pursuant to S. 2018 would be designated as "potential wilderness". These potential wilderness areas would be designated as wilderness at such time as they are acquired by the Park Service and uses incompatible with wilderness designation are terminated or phased out.

Finally, consistent with the general management plan for the monument, S. 2018, as introduced, increased the development ceiling for the park to $2,967,750. These funds will be used for the construction of a park visitor center, roads, parking and boat launching facilities.

Legislative History

S. 2018 was introduced by Senators Thurmond and Hollings on February 1, 1988. A hearing was held by the Subcommittee on Public Lands, National Parks and Forests on June 23, 1988.

At the business meeting on Wednesday, August 3, 1988, the Senate Committee on Energy and Natural Resources ordered S. 2018, as amended, favorably reported.

Committee Recommendations and Tabulation of Votes

The Senate Committee on Energy and Natural Resources, in open business session on Wednesday, August 3, 1988, by a unani-

mous vote of a quorum present, recommends that the Senate pass S. 2018 if amended, as described herein.

The rollcall vote on reporting the measure was 19 yeas, 0 nays, as follows:

YEAS	NAYS
Mr. Johnston*	
Mr. Bumpers*	
Mr. Ford	
Mr. Metzenbaum*	
Mr. Melcher	
Mr. Bradley*	
Mr. Bingaman	
Mr. Wirth	
Mr. Fowler*	
Mr. Conrad	
Mr. McClure	
Mr. Hatfield	
Mr. Weicker*	
Mr. Domenici*	
Mr. Wallop*	
Mr. Murkowski	
Mr. Nickles	
Mr. Hecht	
Mr. Evans*	

*Indicates voted by proxy.

Committee Amendments

During the consideration of S. 2018, the Committee adopted an amendment in the nature of a substitute.

The substitute makes numerous technical, clarifying, and conforming, changes in the bill as introduced. In addition, the substitute makes three substantive changes to the measure.

First, 145 acres, known as the "Bruner tract" have been excluded from the proposed monument addition.

Second, language has been added to the reported bill making clear that any depreciating effect that the designation of the original monument may have had on the properties to be added to the monument by S. 2018 shall not be taken into account in determining the market value of these properties.

Finally, the authorization ceiling for development activities at the monument was raised from $2,697,750 in the bill as introduced, to $3,000,000 in the substitute.

Additional information regarding the Committee substitue is contained in the Section-by-Section Analysis of this report.

Section-by-Section Analysis

Section 1 provides a short title.

Section 2 designates approximately 15,000 acres of the monument as wilderness and approximately 6,840 acres as potential wilderness. Those lands designated as wilderness comprise most of the existing monument while the potential wilderness additions cover most of the land which would be added to the monument pursuant

to S. 2018. Upon acquisition these potential wilderness additions are, in so far as practicable, to be managed by the Secretary as wilderness until such time as any uses not prohibited by the Wilderness Act have ceased. At such time, these potential wilderness additions will be added to the monument wilderness by publication of an appropriate notice in the Federal Register.

The Committee intends that the boundaries of the non-wilderness western access road corridor shall be as narrow as practicable to allow for necessary maintenance and repairs to the existing road. Such boundaries should not, in general, exceed 20 feet from the center of the road.

With regard to the road located west of Weston Lake and identified as potential wilderness, the Committee recognizes that motor vehicle access is required to service and maintain the state air quality monitoring station until a suitable alternative site can be identified. Under the potential wilderness designation, only minimal motor vehicle access by the state agency should be permitted for this purpose and for eventual relocation of the monitoring station.

Section 3 includes standard language regarding the filing of official maps and legal descriptions of the boundaries of the wilderness and potential wilderness.

Likewise, section 4 contains standard language regarding the administration of lands included in the National Wilderness Preservation System pursuant to this Act.

Section 5 amends the 1976 legislation establishing the Congaree Swamp National Monument in two respects. First, a new subsection (b)(1) is added referencing a new map depicting the approximately 6,855 acres to be added to the monument and containing conforming language.

In addition, a new subsection (b)(2) is added regarding the valuation of properties to be acquired pursuant to S. 2018.

During the hearings on S. 2018, the Committee received testimony concerning the prospective valuation of lands proposed for addition to the monument. This testimony concerned lands situated between the southern boundary of the existing monument and the Congaree River. These landowners currently have no road access to their property as this access was terminated when the Park Service acquired the lands comprising the so-called "Biedler tract". The landowners have expressed the fear that when their lands are valuated for acquisition, the fact there is no road access to remove the timber on these lands will be considered as a factor to significantly reduce the value of these lands.

To ensure that this would not happen, the substitute amendment includes language making it clear that when the Park Service values these lands that it should not consider any depreciating effect which may have been caused by the acquisition of the existing monument.

Section 6 amends the original Congaree Swamp National Monument legislation to provide for such additional sums as may be necessary to acquire the lands to be added to the monument. Similarly, this section amends the 1976 legislation to provide for a $3,000,000 development ceiling at Congaree.

Cost and Budgetary Considerations

The Congresssional Budget Office estimate of the costs of this measure has been requested but was not received at the time the report was filed. When the report is available, the Chairman will request it to be printed in the Congressional Record for the advice of the Senate.

Regulatory Impact Evaluation

In compliance with paragraph 11(b) of Rule XVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out S. 2018. The bill is not a regulatory measure in the sense of imposing Government-established standards or significant economic responsibilities on private individuals and businesses.

No personal information would be collected in administering the program. Therefore, there would be no impact of personal privacy.

Little, if any, additional paperwork would result from the enactment of S. 2018, as reported.

Executive Communications

On April 21, 1988, the Committee on Energy and Natural Resources requested legislative reports from the Department of the Interior and the Office of Management and Budget setting forth executive views on S. 2018. These reports had not been received at the time the report on S. 2018 was filed. When the reports become available, the chairman will request that they be printed in the Congressional Record for the advice of the Senate. The testimony provided by the appropriate agency at the Subcommittee hearing follows:

STATEMENT OF JERRY ROGERS, ASSOCIATE DIRECTOR, CULTURAL RESOURCES, NATIONAL PARK SERVICE, DEPARTMENT OF THE INTERIOR, BEFORE THE SUBCOMMITTEE ON NATIONAL PARKS, PUBLIC LANDS AND FORESTS OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES CONCERNING S. 2018, A BILL TO EXPAND THE BOUNDARIES OF THE CONGAREE SWAMP NATIONAL MONUMENT, TO DESIGNATE WILDERNESS THEREIN, AND FOR OTHER PURPOSES.

JUNE 23, 1988

Mr. Chairman and Members of the Committee, it is a pleasure to be here today to discuss S. 2018, a bill to expand the boundaries of Congaree Swamp National Monument, to designate wilderness within the monument, and for other purposes.

Mr. Chairman, we oppose enactment of S. 2018 at this time and request that Congress take no action until the Administration has had an opportunity to complete the planning process which Congress called for when it authorized this unit of the National Park System in 1976.

Congress established the Congaree Swamp National Monument "...to preserve and protect for the education, inspiration, and enjoyment of present and future generations an outstanding example of a near-virgin southern hardwood forest ..." A 15,138-acre tract of land was subsequently acquired from a single owner and today constitutes the monument in its entirety. The Congress, however, recognizing that there were additional resources worthy of professional assessment in the immediate vicinity, directed that the National Park Service examine these resources through the general management planning process and report to the Congress on their suitability for inclusion within the monument for resource protection, scenic integrity, or management and administration. Additionally, the plan was to include the number of visitors and types of public use that could be accommodated within the monument in accordance with the protection of its resources, and the location and estimated cost of facilities deemed necessary to accommodate such visitors and

uses.

The National Park Service is in the final stages of that planning process, having submitted a draft document for public review and revised it according to that input. It is anticipated that the final document will be available for Administration review within the next few months. Our recommendation today is that that process be allowed to run its course.

S. 2018 would expand the boundaries of Congaree Swamp National Monument by some 7,000 acres, designate approximately 15,138 acres of wilderness and potential wilderness within the expanded monument boundaries, and increase the monument's development ceiling to $2,697,750. Certain of these lands perhaps do have merit as they may well provide protection for the resources of the monument, add critical habitat for endangered wildlife, or provide guaranteed access to the monument for both visitors as well as park administrators. However, until the specifics of the planning process are made known to this Administration and are dealt with according to critical requirements of the resource for preservation and interpretation, it would be impossible to test the reasonableness of S. 2018 or any variation thereof. We have heard land acquisition estimates which place the cost of these additional lands somewhere between 10 and 12 million dollars. We also sense that there is a reluctance by once willing sellers to part with their properties absent guarantees of inflated values. We certainly do not subscribe to these attempts. Finally, Mr. Chairman, as we have said on previous occasions, we do not think it fair in these times of fiscal austerity to send false signals to affected landowners that the Federal government will soon knock on their doors with checkbook in hand to pay them for their lands as soon as this measure becomes law. We both know from past experience that that simply will not happen. And to further raise expectations of local residents that passage of this legislation will signal the beginning of extensive development of the monument when those expectations are very

unlikely to be reealized would be unwise.

S. 2018 proposes to add approximately 3,100 acres to the monument along its easternmost end and would propose that they be added to the wilderness acreage, as well. These lands are currently owned by Georgia Pacific and have been harvested to the point that they are not worthy of addition to the monument. We do not believe that Congress intended to enlarge the monument through this planning process simply to include more resources but rather intended to protect what was seen as a core unit which needed enhancement along its margins. The Georgia Pacific lands do not fall into this category but would merely expand the monument to the east. These acres would not add significantly to the area Congress envisioned in 1976.

Mr. Chairman, this concludes my prepared remarks concerning S. 2018. I would be pleased to respond to any questions you or other Members of the Committee may have at this time.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of Rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill S. 2018, as ordered reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

CONGAREE SWAMP

An Act to authorize the establishment of the Congaree Swamp National Monument in the State of South Carolina, and for other purposes. (90 Stat. 2517) (P.L. 94-545)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That *(a)* in order to preserve and protect for the education, inspiration, and enjoyment of present and future generations an outstanding example of a near-virgin southern hardwood forest situated in the Congaree River floodplain in Richland County, South Carolina, there is hereby established the Congaree Swamp National Monument (hereinafter referred to as the "monument"). The monument shall consist of the area within the boundary as generally depicted on the map entitled "Congaree Swamp National Monument", numbered CS-80-001-B, and dated August 1976 (generally known as the Beidler Tract), which shall be on file and available for public inspection in the offices of the National Park Service, Department of the Interior. Following reasonable notice in writing to the Committees on Interior and Insular Affairs of the Senate and House of Representatives of his intention to do so, the Secretary of the Interior (hereinafter referred to as the "Secretary") may make minor revisions of the boundary of the monument by publication of a revised map or other boundary description in the Federal Register [, but the total area may not exceed fifteen thousand, two hundred acres.].

(b)(1) In addition to the lands described in subsection (a), the monument shall consist of the additional lands within the boundary as generally depicted on the map entitled "Citizens Boundary Proposal for Congaree Swamp National Monument", numbered 178-80-0009, dated July 1988, which shall be on file and available for public inspection in the offices of the National Park Service, Department of the Interior. The map may be revised as provided in subsection (a). The total acreage of the monument including lands described in subsection (a) and this subsection shall not exceed 22,200 acres.

(2) In determining the market value of properties acquired pursuant to this subsection, any depreciating effect or loss in value of such properties resulting from establishment of the Monument, which depreciating effect or loss occurred after Federal acquisition of the Beidler tract and prior to enactment of this subsection, shall not be taken into account.

* * * * * * *

SEC. 5. (a) The Secretary may not expend more than $35,500,000 from the Land and Water Conservation Fund for land acquisition nor more than $500,000 for the development of essential facilities.

The Secretary may expend such additional sums as are necessary from the Land and Water Conservation Fund for acquisition of lands described in subsection (b) of the first section.

(b) Within three years from the effective date of this Act the Secretary shall, after consulting with the Governor of the State of South Carolina, develop and transmit to the Committees on Interior and Insular Affairs of the United States Congress a general management plan for the use and development of the monument consistent with the purposes of this Act, indicating:

(1) the lands and interests in lands adjacent or related to the monument which are deemed necessary or desirable for the purposes of resource protection, scenic integrity, or management and administration of the area in furtherance of the purposes of this Act, and the estimated cost thereof;

(2) the number of visitors and types of public use within the monument which can be accommodated in accordance with the protection of its resources;

(3) the location and estimated cost of facilities deemed necessary to accommodate such visitors and uses.

(c) Notwithstanding subsection (a), there are hereby authorized to be appropriated $3,000,000 for construction and development within the monument.

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